

Lectrosonics
MPE Calculator

Model: D4T Test Number: 090122T

MPE uses EIRP for calculation. EIRP is based on TX power added to the antenna gain in dBi.
dBi = dB gain compared to an isotropic radiator.
S = power density in mW/cm²

				Antenna Gain (dBi)	6
		Output Power		dBd + 2.17 = dBi	2.2
Tx Frequency (MHz)	912.384	Maximum (Watts)	0.8185	Antenna Gain (dBd)	3.83
Cable Loss (dB)	0.0	(dBm)	29.13	Antenna minus cable (dBi)	6.00
	Calculated ERP (mw) 1977.055			EIRP = Po(dBm) + Gain (dB)	
	Calculated EIRP (mw) 3258.507			Radiated (EIRP) dBm	35.130
				ERP = EIRP - 2.17 dB	
				Radiated (ERP) dBm	32.960
	Occupational Limit	Power density (S)			
	3.04128 mW/cm ²	S= EIRP/(4πr ²) mW/cm ²			
		S(mW/cm ²), r(cm), EIRP(mW)			
	General Public Limit				
	0.60826 mW/cm ²				

FCC radio frequency radiation exposure limits per 1.1310		
Frequency (MHz)	Occupational Limit	Public Limit
300-1,500	f/300	f/1500
1,500-10,000	5	1

FCC radio frequency radiation exposure limits per 1.1310		
Frequency (MHz)	Occupational Limit @ Tx Freq (mW/cm ²)	Public Limit @ Tx Freq (mW/cm ²)
300-1,500	3.04128	0.608256
1,500-10,000	5	1

EIRP	Distance	Distance	S	Distance
milliwatts	cm	inches	mW/cm ²	Feet
3258.507	100.00	39.37	0.02593	3.28
3258.507	90.00	35.43	0.03201	2.95
3258.507	80.00	31.50	0.04052	2.62
3258.507	70.00	27.56	0.05292	2.30
3258.507	60.00	23.62	0.07203	1.97
3258.507	50.00	19.69	0.10372	1.64
3258.507	40.00	15.75	0.16206	1.31
3258.507	35.00	13.78	0.21168	1.15
3258.507	30.00	11.81	0.28812	0.98
3258.507	25.00	9.84	0.41489	0.82
3258.507	21.00	8.27	0.58799	0.69
3258.507	20.00	7.87	0.64826	0.66
3258.507	15.00	5.91	1.15246	0.49
3258.507	10.00	3.94	2.59304	0.33
3258.507	9.25	3.64	3.03058	0.30
3258.507	8.00	3.15	4.05162	0.26
3258.507	5.00	1.97	10.37215	0.16

Frequency (MHz)	Occupational Limit minimum Distance (cm / inches)	Public Limit minimum distance (cm / inches)
300-1,500	9.25 / 3.64	21 / 8.3
1,500-10,000	N/A	N/A

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Revision 1

Lectrosonics, Inc.
Model: D4T
Test #:090122T
Test to: CR47 Parts 2 and 15C, RSS-210
File: RFExp D4T

IC: 8024A-D4T
FCC ID: DBZD4T
SN: 005
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